

Appl. No. 09/842,148  
Reply to Office action Mailed 18 December 2004  
Page 2

**IN THE CLAIMS:**

Please cancel claims 11 and 13-16 without prejudice or disclaimer as to the subject matter thereof.

1. (currently amended) A system for treating cardiac arrhythmia, the system comprising:

a sensing lead configured to sense electrical signals attendant to the depolarization and repolarization of a heart and indicative of heart rate;

a processor configured to receive the electrical signals indicative of heart rate, to detect cardiac arrhythmia only from heart rate and without regard to patient hemodynamic condition by applying arrhythmia detection algorithms and predefined arrhythmia criteria to the electrical signals indicative of heart rate, to discriminate between an atrial arrhythmia and a ventricular arrhythmia as a function of only heart rate, and to generate an arrhythmia signal as a function of the type of arrhythmia discriminated as a function of only the heart rate; and

a drug delivery system configured to receive the arrhythmia signal, the drug delivery system comprising:

a first drug pump containing a first drug;

a second drug pump containing a second drug, wherein said second drug differs from said first drug;

a first infusion apparatus coupled to the first drug pump; and

a second infusion apparatus coupled to the second drug pump,

wherein the drug delivery system is configured to activate the first drug pump to dispense the first drug via the first infusion apparatus when the arrhythmia signal is indicative of atrial arrhythmia, and

wherein the drug delivery system is configured to activate the second drug pump to dispense the second drug via the second infusion apparatus when the arrhythmia signal is indicative of ventricular arrhythmia.

Appl. No. 09/042,148  
Reply to Office action Mailed 16 December 2004  
Page 3

2. (currently amended) The system of claim 1, further comprising a cardiac pacing system coupled to the processor, the pacing system including a pacing lead configured to provide pacing pulses to cardiac tissue.
3. (currently amended) The system of claim 1, wherein the system is adapted for implantation in a living subject~~implantable in a human body~~.
4. (original) The system of claim 1, wherein the sensing lead is a first sensing lead, the system further comprising a second sensing lead configured to sense electrical signals attendant to the depolarization and repolarization of the heart, wherein one of the sensing leads is located in an atrium of the heart and the other of the sensing leads is located in a ventricle of the heart.
5. (original) The system of claim 1, further comprising a controller, the controller configured to receive the arrhythmia signal to generate a first control signal to activate the first drug pump when the arrhythmia signal is indicative of atrial arrhythmia, and to generate a second control signal to activate the second drug pump when the arrhythmia signal is indicative of ventricular arrhythmia.
6. (original) The system of claim 5, further comprising memory, the controller interacting with the memory to access treatment instructions and parameters.
7. (original) The system of claim 5, further comprising an input/output device coupled to the controller.
8. (currently amended) The system of claim 1, the drug delivery system further comprising:  
a third drug pump containing a third drug, wherein said third drug differs from said first drug and from said second drug; and  
a third infusion apparatus coupled to the third drug pump;

Appl. No. 09/842,148  
Reply to Office action Mailed 16 December 2004  
Page 4

wherein the drug delivery system is configured to activate the third drug pump as a function of the arrhythmia signal.

9. (original) The system of claim 1, wherein the first drug is selected from the group consisting of digitalis and beta blockers.

10. (original) The system of claim 1, wherein the second drug is selected from the group consisting of lidocaine and amlodarone

11.-43. (canceled)